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Inventors: Wood et al. Serial No. 09/813858

PATENT APPLICATION

Navy Case No. 79,849

Appendix

See Substitute Formal Drawings

See Duplicate IDS



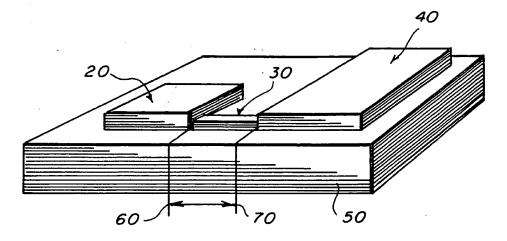
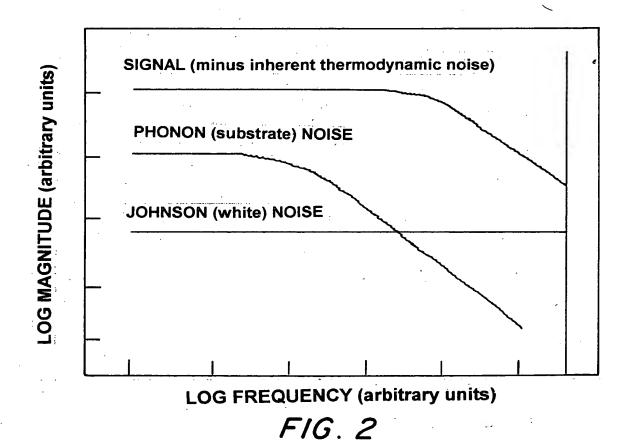


FIG. 1





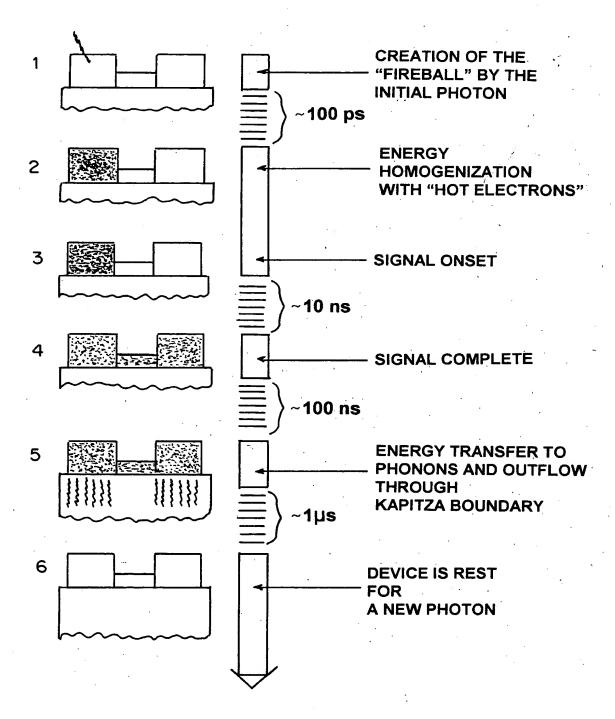


FIG. 3



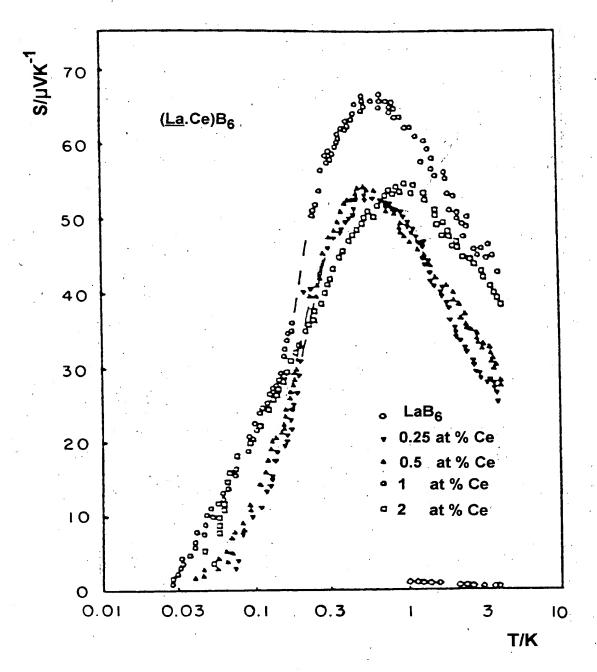
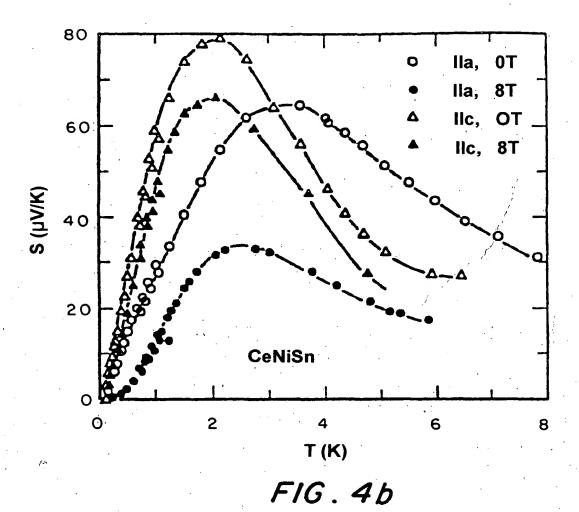


FIG. 4a





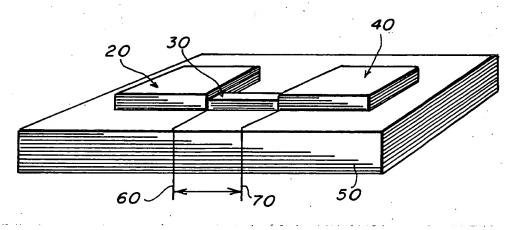


FIG. 5



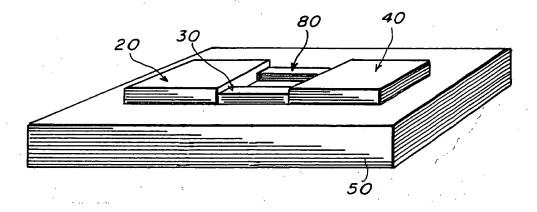


FIG. 6a

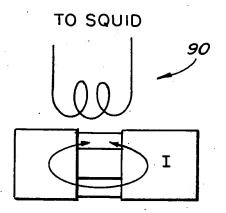
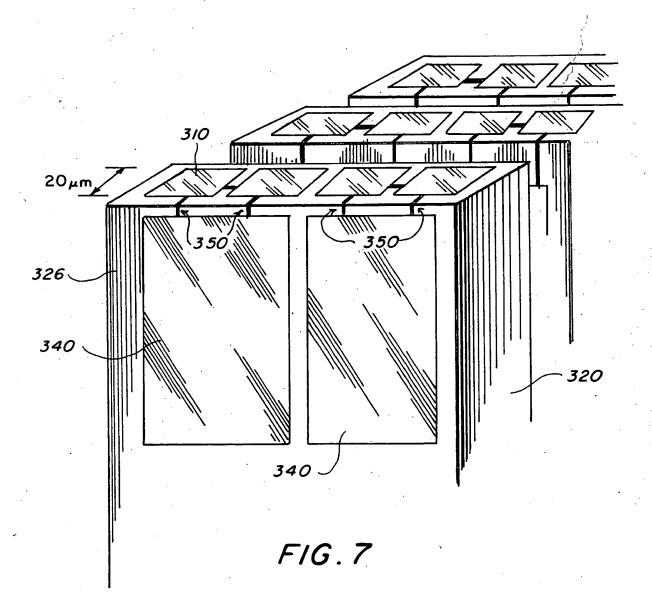


FIG. 6b







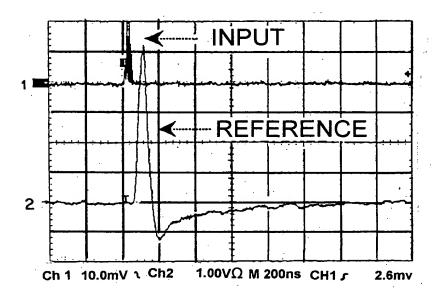


FIG. 8a

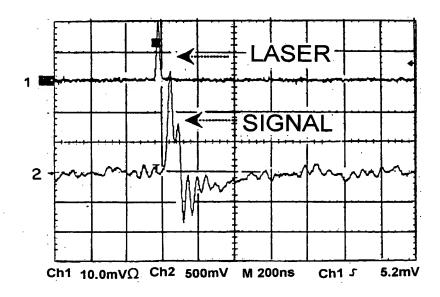


FIG. 8b



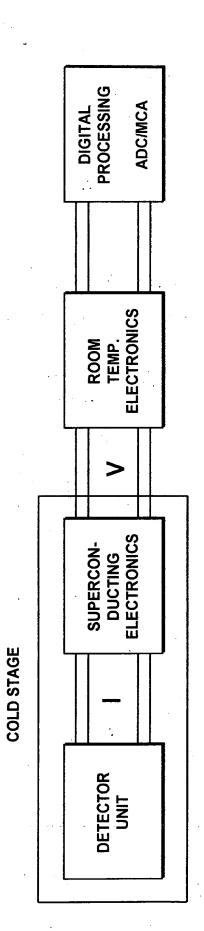


FIG. 9





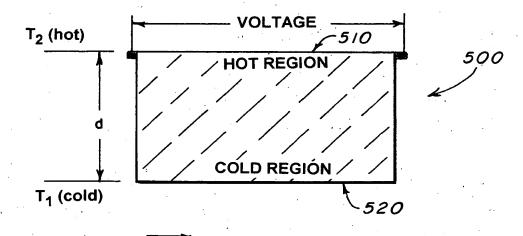
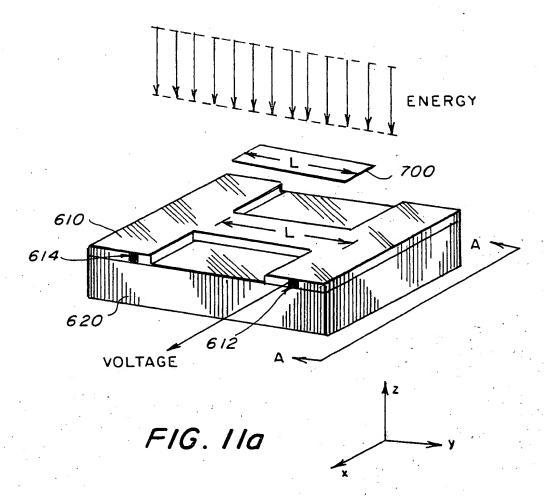


FIG. 10





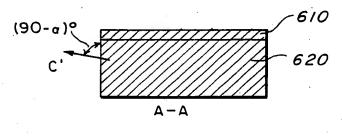


FIG. 11b



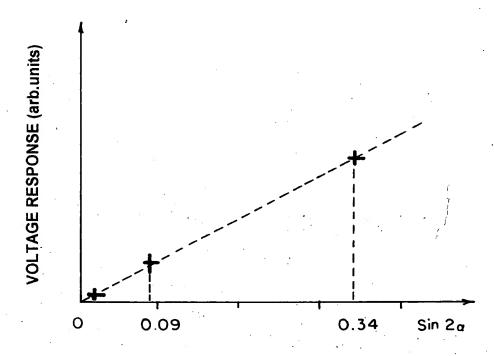


FIG. 12

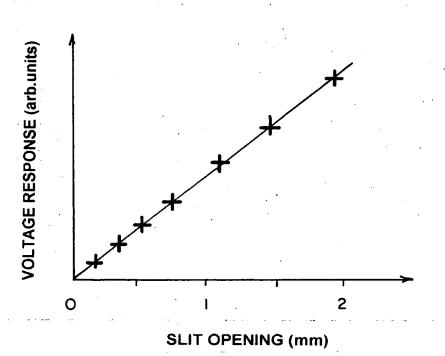


FIG. 13



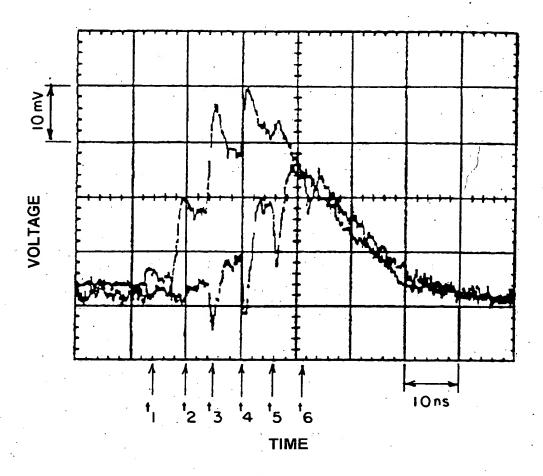
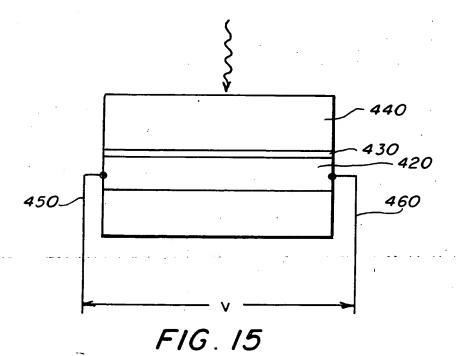


FIG. 14



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1 2000 E	
HIN IRADEMAN	D. Van Vechten, K. Wood, G. Fritz, J. Horwitz, A. Gyulamiryan, A. Kuzanyan, V. Vartanyan, A. Gulian, "Imaging Detectors based on Anisotropic Thermoelasticity", Nuclear Instruments and Methods in Physics A 444 (2000) 42-45. Publication date April 11, 2000
	D. Van Vechten, K. Wood, G. Fritz, A. Gyulamiryan, V. Nikogosyan, N. Giordano, T. Jacobs, A. Gulian, "Thermoelectric Single Photon Detectors: Isotropic Seebeck Sensors" IEEE 18th International Conference on Thermoelectrics (1999), pp 478-480.
	A.M. Gulian, D. Van Vechten, K.S. Wood, G.G. Fritz, J. Horwitz, M.S. Osofsky, J.M. Pond, S.B. Qadri, R.M. Stroud, J.B. Thrasher, V. Vartanyan, A.S. Kuzanyan, V.R. Nikogosyan, A.L. Gyulamiryan, "Imaging Detectors based on the Response of Anisotropic Layered Materials", IEEE Transactions on Applied Superconductivity, Vol 9, No. 2, June 1999, pp. 3194-3197.
	G.G. Fritz, K.S. Wood, D. Van Vechten, A.L. Gyulamiryan, A.S. Kuzanyan, N. Giordano, T.M. Jacobs, HD. Wu, J.S. Horwitz, A.M. Gulian, "Thermoelectric Single-Photong Detectors for X-ray/UV Radiation", X-Ray and Gamma Ray Instrumentation for Astronomy XI, K.A. Flanagan, O.H.W. Siegmund, eds., Proc. SPIE Vol 4140 (Aug 2000), 459-469.
	E.V. Osipov, A. Aulas, "Nature of Thermoelectric Anisotropy in Semiconductors at the lower temperatures", IEEE 16 th International Conference on Thermoelectrics (1997)
	A.J. Miller, B. Cabrera, R.M. Clarke, E. Figueroa-Fleliciano, S. Nam, R.W. Romani, "Transition Edge Sensors as Single Photon Detectors", IEEE Transactions on Applied Superconductivity, Vol 9, No. 2, June 1999, pp. 4205-4208.
	K.D. Irwin, S.W. Nam, B. Cabrera, B. Chugg, G.S. Park, R.P. Welty, J.M. Martinis, "A Self-Biasing Cryogenic Particle Detector Utilizing Electrothermal Feedback and a SQUID Readout", IEEE Transactions on Applied Superconductivity, Vol 5, No. 2, June 1995, pp. 2690-2693.
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U.S. PATENT DOCUMENTS

Exr	Int*	Document No.	Date	Name	Class	Subcl	F. Date
		5,880,468	03/99	Irwin et al.	250	336.2	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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8	THADEMA	D. Van Vechten, K. Wood, G. Fritz, J. Horwitz, A. Gyulamiryan, A. Kuzanyan, V. Vartanyan, A. Gulian, "Imaging Detectors based on Anisotropic Thermoelasticity", Nuclear Instruments and Methods in Physics A 444 (2000) 42-45. Publication date April 11, 2000
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		A.M. Gulian, D. Van Vechten, K.S. Wood, G.G. Fritz, J. Horwitz, M.S. Osofsky, J.M. Pond, S.B. Qadri, R.M. Stroud, J.B. Thrasher, V Vartanyan, A.S. Kuzanyan, V.R. Nikogosyan, A.L. Gyulamiryan, "Imaging Detectors based on the Response of Anisotropic Layered Materials", IEEE Transactions on Applied Superconductivity, Vol 9 No. 2, June 1999, pp. 3194-3197.
		G.G. Fritz, K.S. Wood, D. Van Vechten, A.L. Gyulamiryan, A.S. Kuzanyan, N. Giordano, T.M. Jacobs, HD. Wu, J.S. Horwitz, A.M. Gulian, "Thermoelectric Single-Photong Detectors for X-ray/U Radiation", X-Ray and Gamma Ray Instrumentation for Astronomy XI, K.A. Flanagan, O.H.W. Siegmund, eds., Proc. SPIE Vol 4140 (Aug 2000), 459-469.
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		K.D. Irwin, S.W. Nam, B. Cabrera, B. Chugg, G.S. Park, R.P. Welty J.M. Martinis, "A Self-Biasing Cryogenic Particle Detector Utilizing Electrothermal Feedback and a SQUID Readout", IEEE Transactions on Applied Superconductivity, Vol 5, No. 2, June 1995, pp. 2690-2693.

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